IAP3 Rec'd PCT/PTO 28 DEC 2005

Under the Paperwork Reduc-

U.S. Patent and Trad a of 1995, no persons are required to respond to a collection of informa-

PTO-1390 (Rev. 02-2005) 1, for use through 3/31/2007. OMB 0651-0021 iffice; U.S. DEPARTMENT OF COMMERCE unless it displays a valid OMB control number.

		NSMITTAL LETTER TO THE UNITED STATES ESIGNATED/ELECTED OFFICE (DO/EO/US)	·	ATTORNEY'S DOCKET NUMBER 436589				
(CERNING A SUBMISSION UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/535,688				
	ERNAT	IONAL APPLICATION NO. INTERNATIONAL FILING D 12433 November 6, 2003	ATE	PRIORITY DATE CLAIMED November 12, 2002				
		IVENTION SURFACE-EMITTING SEMI-CONDUCTOR LASERS HAVING BUR	RIED TUNNE	L JUNCTIONS AND METHODS OF PRODUCING SAME				
APF	PLICANT	(S) FOR DO/EO/US Marcus-Christian AMANN						
Apı	Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:							
1.	□ T	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.						
2.		his is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.						
3.		This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.						
4.	□ T	he US has been elected (Article 31).						
5.		A copy of the International Application as filed (35 U.S.C. 371(c)(2))						
		a.	nternationa	al Bureau).				
b. has been communicated by the International Bureau.								
		c.	es Receivin	g Office (RO/US).				
6.								
		 a is attached hereto. b has been previously submitted under 35 U.S.C. 154(d)(4). 						
7.		Amendments to the claims of the International Application under PCT	Article 19 (35 U.S.C. 371(c)(3))				
	_	a. are attached hereto (required only if not communicated by the International Bureau).						
		b. have been communicated by the International Bureau.						
		c. have not been made; however, the time limit for making such amendments has NOT expired.						
		d. have not been made and will not be made.						
8.		An English language translation of the amendments to the claims under	er PCT Arti	cle 19 (35 U.S.C. 371(c)(3)).				
9	\boxtimes	An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).						
10.		An English language translation of the annexes of the International Pre Article 36 (35 U.S.C. 371(c)(5)).	annexes of the International Preliminary Examination Report under PCT					
Items 11 to 20 below concern document(s) or information included:								
11.	\boxtimes	An Information Disclosure Statement under 37 CFR 1.97 and 1.98.						
12.	\boxtimes	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.						
13.		A preliminary amendment.						
14.		An Application Data Sheet under 37 CFR 1.76.						
15.		A substitute specification.						
16.	\boxtimes	A power of attorney and/or change of address letter.						
17.		A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.						
18.		A second copy of the published International Application under 35 U.S.		·				
		A second copy of the English language translation of the international a						
20.		Other items or information: Submission of Missing Requirements, IDS Transmittal, Copy of 10 References, Certificate of Mailing and						

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

		Unde	r the Paperwork Redu	ction Act of	1995, no persons are required to re	espond (U.S. Patent and Tr	roved for use through 3/3	TO-1390 (Rev. 02-2005) 1/2007. OMB 0651-0021 RTMENT OF COMMERCE a valid OMB control number.
•	U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/535,688			INTERNATIONAL APPL	INTERNATIONAL APPLICATION NO. PCT/EP03/12433			KET NUMBER 36589	
	The following fees are submitted: 21. Basic national			\$3				PTO USE ONLY	
	22. Examination Fee If international preliminary examination report prepared by USI PCT Article 33(1)-(4)			JSPTO and all claims satisfy provi	PTO and all claims satisfy provisions of				
	23. Search fee earch fee (37 CFR 1.445(a)(2) has been paid on the international application to the USPTO as an International Searching Authority					\$			
	TOTAL OF 21, 22 and 23 =							\$ 0	
	Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.								
ļ	Total Sheets	Extra	sheets		mber of each additional 50 or frac thereof (round up to a whole num	-	RATE		
	- 100 =		0/50 =				x \$250	\$ 0	
	Surcharge of \$130.0 claimed priority date			eclaration	later than 30 months from the earl	iest		\$ 130	
	CLAIMS	137 01	NUMBER FILE)	NUMBER EXTRA		RATE	\$	
	Total claims			- 20 =	0	х	\$50	\$ 0	
	Independent clair	ns		- 3 =	0	x	\$200	\$0	
	MULTIPLE DEPEN	IDENT (CLAIM(S) (if applicab	le)		+	\$360	\$	
	TOTAL OF ABOVE CALCULATIONS =							\$ 130	
	Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.				oy ½.	\$			
		. Subtotal =					\$ 130		
	TOTAL NATIONAL FEI					t .	\$ 130		
							\$ 260		
01/03/200	Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31), \$40.00 per property +							\$ 40	
01 FC:161 02 FC:161	130.00 DH							\$ 300 Amount to be refunded:	\$
								Amount to be charged:	\$
	a. A check in the amount of \$ to cover the above fees is enclosed. b. Please charge my Deposit Account No. 12-0600 in the amount of \$ 300.00 to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-0600 A duplicate copy of this sheet is enclosed. d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: CUSTOMER NO. 30955 LATHROP & GAGE LC 4845 Pearl East Circle, Suite 300 NAME Boulder, Colorado 80301 To cover the above fees is enclosed. 10 to cover the above fees. 300.00 to cover the above fees. 40 cover the above fees. 41 cover the above fees. 41 cover the above fees. 42 cover the above fees.								

CERTIFICATE OF EXPRESS MAIL PO	Matter No.		
Applicant(s): Marcu	436589		
Serial No.	Filing Date	Examiner	Group Art Unit
10/535,688	May 19, 2005	Not Yet Assigned	Not Yet Assigned

Invention Surface-Emitting Semi-Conductor Lasers Having Buried Tunnel Junctions And Methods of Producing same

I hereby certify that the following: Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Submission Under 35 U.S.C. 371 (2 pages in duplicate); Response to Missing Requirements (1 page); Copy of Notification of Missing Requirement Under 35 USC 371 In the United States Designated/Elected Office (DO/EO/US) (2 pages); Declaration And Power of Attorney For Patent Application (3 pages); Recordation Form Cover Sheet (1 page in duplicate); Assignment for Application (1 page); Power of Attorney And Correspondence Indication Form (1 page); Statement Under 37 CFR 3.73(b) with copy of Assignment (2 pages); Information Disclosure Statement By Applicant (2 pages); Copy of 10 references; authorization to charge \$300 (\$130 for the late filing of translation, \$130 for late filing of declaration and \$40 for the recordation); authorization to charge additional fees that may be required, or credit any overpayment, to Deposit Account No. 12-0600; and return post card are being mailed in an envelope addressed to: Mail Stop: PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28th day of December, 2005.

Sharm Dehent	
Signature of Depositor	
EV413219918US	
Express Mail Label No.	

Sharon Schenk

rney Docket No.: 436589

Express Mail Label No.: EV413219918US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Marcus-Christian Amann

Serial No .:

10/535,688

Filed:

May 19, 2005

For

Surface-Emitting Semi-Conductor Lasers

Having Buried Tunnel Junctions And Methods of Producing Same

Examiner:

Not Yet Assigned

Group Art No.:

Not Yet Assigned

Confirmation No.

4283

December 28, 2005

Mail Stop PCT Commissioner For Patent P.O. Box 1450 Alexandria, VA 22313-1450

RESPONSE TO MISSING REQUIREMENTS

Dear Sir:

In response to the Notification of Missing Requirements Under 35 USC 371 In The United States Designated/Elected Office (DO/EO/US) dated November 28, 2005 (copy appended), enclosed herewith find the following:

- Declaration And Power of Attorney For Patent Application; 1.
- 2. Recordation Form Cover Sheet;
- 3. Assignment;
- 4. Power of Attorney And Correspondence Address Indication Form; and
- 5. Statement Under 37 CFR 3.73(b).

Pursuant to 37 CFR 1.492(i), the \$130.00 fee for late submission of translation; 37 CFR 1.492(h) for late filing of the Declaration and pursuant to 37 CFR 1.21, the \$40.00 fee for recordation of assignment should be applied against our Deposit Account No. 12-0600. Any additional fee which might be due in connection with this request should be applied against our Deposit Account No. 12-0600.

The Examiner is encouraged to contact the undersigned if prosecution of the application may be expedited thereby.

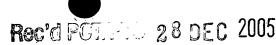
Respectfully submitted,

LATHROP & GAGE LLC

Curtis A. Vock, Reg. No. 38,356

4845 Pearl East Circle, Suite 300 Boulder, Colorado 80301

Tel No: (720) 931-3011 Fax No: (720) 931-3001



436589



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE UNITED STATES DEFAM MENT OF COMMITTED STATES AND ACCORDANCE OF COMMISSIONER FOR PATENTS P.O. Do. No. 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

ATTY, DOCKET NO. FIRST NAMED APPLICANT U.S. APPLICATION NUMBER NO.

Marcus-Christian Amann

30955 LATHROP & GAGE LC 4845 PEARL EAST CIRCLE SUITE 300 BOULDER, CO 80301

10/535,688

INTERNATIONAL APPLICATION NO. PCT/EP03/12433 I.A. FILING DATE PRIORITY DATE 11/12/2002 11/06/2003

CONFIRMATION NO. 4283 371 FORMALITIES LETTER *OC000000017349976*

Date Mailed: 11/28/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 05/19/2005
- English Translation of the IA filed on-05/19/2005
- Copy of the International Search Report filed on 05/19/2005
- Copy of IPE Report filed on 05/19/2005
- Preliminary Amendments filed on 05/19/2005
- Copy of references cited in ISR filed on 05/19/2005
- U.S. Basic National Fees filed on 05/19/2005
- Substitute Specification filed on 05/19/2005
- Priority Documents filed on 05/19/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Processing fee for providing the translation of the application and/or the Annexes later than 30 months from the priority date (37 CFR 1.492(i)).
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.



SUMMARY OF FEES DUE:

Total additional fees required for this application is \$260 for a Large Entity:

- \$130 Surcharge.
- \$130 for English translation surcharge required.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice **MUST** be returned with the response.

MAMIE P PERSON

Telephone: (703) 308-9140 EXT 227

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.	
10/535,688	PCT/EP03/12433	436589	

FORM PCT/DO/EO/905 (371 Formalities Notice)